10/518787 HR

CofC

PATENT
Customer No. 22,852
Attorney Docket No. 07552.0050-00000

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re U.S. Patent No.: 7,517,387 B2)
)
Inventors: Jacques CHEVALLET et al.)
) Decisions & Certificates
Issue Date.: April 14, 2009)
) Examiner: Cecelia Newman
For: GAS SEPARATION DEVICES)

MAIL STOP: CERTIFICATE OF CORRECTION BRANCH
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

REQUEST FOR RECONSIDERATION OF REQUEST FOR CERTIFICATE OF CORRECTION

Pursuant to 35 U.S.C. 254 and 37 C.F.R. 1.322, this is a second request for the issuance of a Certificate of Correction in the above-identified patent. Two (2) copies of PTO Form 1050 are appended. The complete Certificate of Correction involves one (1) page.

The mistake identified in the attached form occurred through the fault of the Patent Office, as clearly disclosed by the records of the application which matured into this patent. Issuance of the Certificate of Correction containing the correction is earnestly requested.

Applicant received the May 11, 2009, denial by the PTO of Applicant's request for correction of issued claims 42 and 57 (copy enclosed). Applicant

submits the following remarks to document support for the request for correction of the claims and to highlight the PTO's error.

A Reply to Office Action was electronically filed on November 6, 2008, which amends application claim 46 (which corresponds to issued claim 42) and application claim 61 (which corresponds to issued claim 57) (copy enclosed).

If it should be determined that this mistake resulted from an error made in good faith by the applicants, then, pursuant to 35 U.S.C. 255 and 37 C.F.R. 1.323, it is requested that a Certificate of Correction be issued correcting such mistake. Under such circumstances, it is requested that the fee set forth in 37 C.F.R. 1.20(a) and any additional fees needed be charged to our Deposit Account No. 06-0916, for which authorization is hereby given.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, L.L.P.

Dated: June 17, 2009

By: */Aaron L. Parker/*
Aaron L. Parker
Reg. No. 50,785

UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO. 7,517,387 B2

APPLICATION NO.: 10/218,787

ISSUE DATE: April 14, 2009

INVENTOR(S): Jacques CHEVALLET et al.

It is hereby certified that an error or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In claim 42, column 13, line 14, "of the said" should read --of said--.

In claim 57, column 14, line 25, "into the said" should read --into said--.

MAILING ADDRESS OF SENDER

Finnegan, Henderson, Farabow,
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UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO. 7,517,387 B2

APPLICATION NO.: 10/218,787

ISSUE DATE: April 14, 2009

INVENTOR(S): Jacques CHEVALLET et al.

It is hereby certified that an error or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In claim 42, column 13, line 14, "of the said" should read --of said--.

In claim 57, column 14, line 25, "into the said" should read --into said--.

MAILING ADDRESS OF SENDER

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07552-0050
GSP/AXP

UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY OF COMMERCE AND
COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, DC 20231

5/6/09

Patent No. :7517387
Inventor(s) :Jacques CHEVALLET et al.
Issued : 4/14/2009
Title : Gas Separation Devices
Atty.doc./File No.

Request for Certificates of Correction

Consideration has been given to your request for the issuance of a Certificate of Correction, for the above – identified patent under the provisions of CFR 1.322.

Inspection of the application for the patent reveals item [57] and claim 42 & 57 is printed in accordance with the record and please show evidence of an amendment or document. Therefore being no fault on the Patent and Trademark Office, It has no authority to issue a certificate of correction under the provision of 1.322.

In view of the forgoing, your request in this matter, is hereby denied.

Future written correspondence concerning this matter should be filed and directed to Decisions & Certificates of Correction Branch.

Henry Randall
Mary Diggs
Decisions & Certificates
of Correction Branch
(703) 308-9390 Ext. 108

FINNEGAN HENDERSON FARABOW
GARRETT & DUNNER LLP
WASHINGTON, DC 20001-4413

HR/MD

K. Daniel

Electronic Acknowledgement Receipt

EFS ID:	4241914
Application Number:	10518787
International Application Number:	
Confirmation Number:	8238
Title of Invention:	Gas separation devices
First Named Inventor/Applicant Name:	Jacques Chevallet
Customer Number:	22852
Filer:	Aaron Lee Parker/Amy-Marie Gonnella
Filer Authorized By:	Aaron Lee Parker
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Application Type:	U.S. National Stage under 35 USC 371

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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)

1		Reply.pdf	911561 97c47717c7da698db97e93dfb3ebbe63dc0 3da78	yes	26

Multipart Description/PDF files in .zip description		
Document Description	**Start**	**End**
Amendment/Req. Reconsideration-After Non-Final Reject	1	1
Specification	2	2
Claims	3	19
Applicant Arguments/Remarks Made in an Amendment	20	24
Drawings-only black and white line drawings	25	25
Extension of Time	26	26

Warnings:

Information:

2	Fee Worksheet (PTO-06)	fee-info.pdf	29896 bd552f604c4b845c41cd8373e0520a0ea90 22992	no	2

Warnings:

Information:

Total Files Size (in bytes):	941457

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PATENT
Attorney Docket No. 07552.0050-00000

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	
Nicolas SEMENZATO et al.	Group Art Unit: 1797
Application No.: 10/518,787	Examiner: Douglas J. THEISEN
Filed: December 21, 2004	
For: GAS SEPARATION DEVICES	Confirmation No.: 8238

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

REPLY TO OFFICE ACTION

In reply to the Office Action mailed May 16, 2008, the period for response having been extended through November 17, 2008 (November 16, 2008 being a Sunday) by a request for extension of 3 months and fee payment filed concurrently herewith, please amend the above-identified application as follows:

Amendments to the Specification begin on page 2 of this Reply.

Amendments to the Claims begin on page 3 of this Reply.

Amendments to the Drawings are included in the attached replacement drawing sheet. The amendments are discussed in this Reply.

Remarks begin on page 21 of this Reply..

Attachments to this amendment include:

Replacement Drawing Sheet 3/3 (Fig. 6).

AMENDMENTS TO THE SPECIFICATION:

Please amend the specification as follows:

Please amend the paragraph beginning on page 13, line 23 as follows:

As an alternative to what is described above, the pressure sensor element ~~34~~ 31 can be made to operate down-line from the device 1.

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A gas ~~Gas~~ separation device for a physiological fluid, comprising:

a containing body having an internal active surface, ~~and having~~ at least one a first inlet aperture for a physiological fluid[[,]] positioned with a tangential direction of access, and at least one outlet aperture for ~~the~~ said fluid spaced apart from ~~the~~ said first inlet aperture; ~~wherein it comprises~~ said containing body having:

a guide element housed at least partially within ~~the~~ said containing body, ~~and having~~ said guide element having a continuous active surface configured ~~designed~~ to contact and guide ~~the~~ said fluid,[[;]] said guide element further comprising:

a first terminal portion configured to face towards said outlet aperture;

a second terminal portion axially opposed to the first terminal portion, said second terminal portion configured to face towards a second chamber extending above said guide element; and

a central portion having a cross section with a radial dimension that is reduced progressively away from said first and second terminal portions, to form an intermediate area having a minimum radial dimension; and

a first annular chamber formed between the active surface of ~~the~~ said guide element and the internal active surface of ~~the~~ said containing body.

2. (Currently Amended) A device ~~Device~~ according to claim 1, wherein ~~the~~ said inlet aperture opens directly into ~~the~~ said first chamber.

3. (Currently Amended) A device ~~Device~~ according to claim 1, wherein ~~the~~ said guide element is wholly housed within the containing body, extends coaxially with the ~~latter~~ containing body, and is spaced axially apart from ~~the~~ said outlet aperture.

4. (Currently Amended) A device ~~Device~~ according to claim 3, wherein the internal active ~~surfaces~~ surface of ~~the~~ said containing body and the active surface of ~~the~~ said guide element face each other and are shaped in the form of surfaces of revolution about a common axis of symmetry, said common axis of symmetry being ~~which is~~ transverse with respect to the tangential direction of access of ~~the~~ said flow.

5. (Currently Amended) A device ~~Device~~ according to claim 1, wherein ~~the~~ said outlet aperture is positioned in a lower end of ~~the~~ said containing body, ~~the~~ said guide element and ~~the~~ said first chamber extending above ~~the~~ said outlet aperture.

6. (Currently Amended) A device ~~Device~~ according to claim 1, wherein ~~the~~ said guide element is a solid or internally hollow solid of rotation, configured ~~designed~~ to reduce the volume of at least ~~the~~ said first chamber.

7-8. (Canceled)

9. (Currently Amended) ~~Device according to Claim 8,~~ A gas separation device for a physiological fluid, comprising:

a containing body having an internal active surface, at least one first inlet aperture for a physiological fluid positioned with a tangential direction of access, and at

least one outlet aperture for said fluid spaced apart from said first inlet aperture; said containing body having:

a guide element housed at least partially within said containing body, said guide element having a continuous active surface configured to contact and guide said fluid; said guide element further comprising:

a central portion;

a first terminal portion configured to face towards said outlet aperture, said first terminal portion having a cross section whose radial dimension is reduced progressively towards said outlet aperture, and wherein ~~the~~ said first terminal portion has a conical shape, said first terminal portion having a ~~with its~~ vertex configured to face ~~facing~~ towards the outlet aperture; and

a second terminal portion axially opposed to the first terminal portion, said second terminal portion configured to face towards a second chamber extending above said guide element; and

a first annular chamber formed between the active surface of said guide element and the internal active surface of said containing body.

10. (Currently Amended) A device ~~Device~~ according to claim 1 ~~Claim 7~~, wherein the second terminal portion has a cross section whose radial dimension is reduced progressively away from ~~the~~ said outlet aperture.

11. (Currently Amended) A device ~~Device~~ according to claim ~~Claim~~ 10, wherein the ~~said~~ second terminal portion has a conical shape, said second terminal portion having a ~~with its~~ vertex opposed to the outlet aperture.

12. (Canceled)

13. (Currently Amended) A device ~~Device~~ according to claim 1 ~~Claim 12~~, wherein the central portion has a curved profile in longitudinal section.

14. (Canceled)

15. (Currently Amended) ~~Device according to Claim 14,~~ A gas separation device for a physiological fluid, comprising:

a containing body having an internal active surface, at least one first inlet aperture for a physiological fluid positioned with a tangential direction of access, and at least one outlet aperture for said fluid spaced apart from said first inlet aperture, wherein said internal active surface of the containing body has:

a first area, of maximum radial dimension, extending around the central portion of the guide element;

a second area, whose radial dimension is reduced progressively towards the outlet aperture, the second area extending consecutively to the first area and substantially around the first terminal portion of the guide element; and

a third area, whose radial dimension is reduced progressively away from the outlet aperture, the third area extending consecutively to the first area and essentially around the second terminal portion of the guide element;

wherein said containing body comprises:

a guide element housed at least partially within said containing body, said guide element having a continuous active surface configured to contact and guide said fluid; said guide element further comprising:

a central portion;

a first terminal portion configured to face towards said outlet aperture;

a second terminal portion axially opposed to the first terminal portion, said second terminal portion configured to face towards a second chamber extending above said guide element; and

a first annular chamber formed between the active surface of said guide element and the internal active surface of said containing body, wherein the first inlet aperture opens into ~~the~~ said first annular chamber[[,]] in ~~the~~ said ~~intermediate~~ first area of the internal active surface of the containing body.

16. (Currently Amended) A device ~~Device~~ according to claim 15 ~~Claim 14~~, wherein the first area of the active surface has a constant radius.

17. (Currently Amended) ~~Device according to Claim 1,~~ A gas separation device for a physiological fluid, comprising:

a containing body having an internal active surface, at least one first inlet aperture for a first physiological fluid positioned with a tangential direction of access, and at least one outlet aperture for said first physiological fluid spaced apart from said first inlet aperture; said containing body having:

a guide element housed at least partially within said containing body, said guide element having a continuous active surface configured to contact and guide said first physiological fluid;

a first annular chamber formed between the active surface of said guide element and the internal active surface of said containing body; and.

~~wherein the said containing body comprises~~ a second inlet aperture located above ~~the~~ said first inlet aperture, said second inlet aperture being configured ~~and designed~~ to convey a second physiological fluid into the containing body.

18. (Currently Amended) A device ~~Device~~ according to claim ~~Claim~~ 17, ~~wherein it comprises~~ further comprising a second chamber extending above ~~the~~ said guide element[[,]] in an axially consecutive position, said second chamber being ~~and~~ in fluid communication with ~~the~~ said first chamber and ~~with the~~ said second inlet aperture.

19. (Currently Amended) A device ~~Device~~ according to claim ~~Claim~~ 18, wherein ~~the~~ said second inlet aperture opens directly into ~~the~~ said second chamber, ~~preferably~~ in a direction parallel to, and staggered with respect to, that of ~~the~~ said first inlet aperture.

20. (Currently Amended) A device ~~Device~~ according to claim ~~Claim~~ 18, wherein ~~the~~ said containing body includes a third chamber, ~~which is~~ being axially consecutive to ~~the~~ said second chamber, said third chamber being configured ~~and which is designed~~ to contain the gas separated from the ~~said~~ first and second physiological fluids, ~~the said third chamber extending~~ and to extend in the top of ~~the~~ said containing body.

21. (Currently Amended) A device ~~Device~~ according to claim ~~Claim~~ 20, ~~wherein it comprises~~ further comprising at least one service line having a first end ~~which is brought into~~ in fluid communication with ~~the~~ said third chamber by means of a fourth aperture formed in ~~the~~ said containing body.

22. (Currently Amended) A device ~~Device~~ according to claim ~~Claim~~ 21, ~~wherein it comprises~~ further comprising at least one pressure sensor element associated for operation with ~~the~~ said service line.

23. (Currently Amended) A device ~~Device~~ according to claim ~~Claim~~ 21, ~~wherein it comprises~~ further comprising at least one hydrophobic membrane associated for operation with an intermediate area of the service line.

24. (Currently Amended) A device ~~Device~~ according to claim ~~Claim~~ 21, wherein the third chamber has a nominal volume V_c delimited below by a theoretical maximum level line BL and above by ~~the~~ said fourth aperture.

25. (Currently Amended) A device ~~Device~~ according to claim ~~Claim~~ 21, further comprising a pneumatic circuit operating in ~~the~~ said service line[[,]] for selectively sending gas to the service line and drawing gas from ~~it~~ the service line.

26. (Currently Amended) A device ~~Device~~ according to claim ~~Claim~~ 25, further comprising a liquid level sensor LLS located above a level BL, and a control unit connected to the sensor LLS and ~~designed~~ configured to control ~~the~~ said pneumatic circuit to maintain the liquid level in the vicinity of ~~the~~ said level BL.

27. (Currently Amended) A device ~~Device~~ according to claim ~~Claim~~ 26, ~~in which~~ wherein the level sensor LLS operates in a section of the service line and ~~in~~

~~which the~~ said control unit is ~~designed~~ configured to cause the execution of the following steps:

[[–]] determining whether LLS is signalling the presence of liquid, and, if so, executing the following sub-steps in sequence:

a) activation of the pneumatic circuit to drive towards the third chamber a volume V_1 equal to the volume between the section in which LLS operates and the fourth aperture,

b) activation of the pneumatic circuit to draw gas from the third chamber while LLS continues to signal the presence of liquid, and

c) activation of the pneumatic circuit to drive towards the third chamber a volume of liquid V_2, equal to $V_1 + V_c$, where V_c is the volume of the third chamber;

[[–]] if, on the other hand, LLS is not signalling the presence of liquid, executing the aforementioned three steps a), b) and c) at specified time intervals.

28. (Currently Amended) A device ~~Device~~ according to claim ~~Claim~~ 21, ~~wherein it comprises~~ further comprising at least one access site located in ~~the~~ said service line for manually drawing fluid from ~~the~~ said line or sending fluid into ~~it~~ said line.

29. (Currently Amended) A device ~~Device~~ according to claim ~~Claim~~ 26, wherein the level sensor LLS can operate on ~~the~~ said containing body.

30. (Currently Amended) ~~Device according to Claim 1,~~ A gas separation device for a physiological fluid, comprising:

a containing body having an internal active surface, at least one first inlet aperture for a physiological fluid positioned with a tangential direction of access, and at

least one outlet aperture for said fluid spaced apart from said first inlet aperture; said containing body having:

a guide element housed at least partially within said containing body, said guide element having a continuous active surface configured to contact and guide said fluid; and

a first annular chamber formed between the active surface of said guide element and the internal active surface of said containing body;

said gas separation device ~~wherein it comprises~~ further comprising:

[[–]] a first line for sending the physiological fluid into ~~the~~ said containing body through the first inlet aperture,

[[–]] a second line for sending a second fluid into ~~the~~ said containing body through a second inlet aperture,

[[–]] a first pump operating to create a flow along the first line,

[[–]] a second pump operating to create a flow along the second line, and

[[–]] a control unit programmed to control the first and second pumps operating in the first and second lines and to ensure the constant presence in the containing body of a layer of ~~the~~ said second fluid ~~whose~~ having a thickness that lies within a specified range, ~~this~~ said layer being located above the physiological fluid.

31. (Currently Amended) A fluid ~~Fluid~~ mixing device with gas separation, comprising a containing body having an internal active surface and having at least one first inlet aperture for a first physiological fluid, and at least one fluid outlet aperture, spaced apart from ~~the~~ said first inlet aperture, wherein the containing body has at least one second inlet aperture located above ~~the~~ said first inlet aperture, said second inlet

aperture being configured ~~and designed~~ to convey a second fluid into the containing body to form a layer of ~~the~~ said second fluid above ~~the~~ said physiological fluid.

32. (Currently Amended) A device ~~Device~~ according to claim ~~Claim~~ 31, wherein ~~the~~ said containing body includes:

[[–]] at least a first chamber extending in a lower area of the containing body and in fluid communication with ~~the~~ said outlet aperture;

[[–]] at least a second chamber, extending in an axially consecutive upper area and in fluid communication with ~~the~~ said first chamber.

33. (Currently Amended) A device ~~Device~~ according to claim ~~Claim~~ 32, wherein ~~the~~ said containing body includes a third chamber~~, which is~~ being axially consecutive to ~~the~~ said second chamber, said third chamber being configured ~~and which is designed~~ to contain the gas separated from the ~~said fluids~~ first physiological fluid and the second fluid, ~~the said third chamber~~ and extending in the top of ~~the~~ said containing body and having a fourth aperture.

34. (Currently Amended) A device ~~Device~~ according to claim ~~Claim~~ 33, ~~wherein it comprises~~ further comprising at least one service line having a first end ~~which is brought into~~ in fluid communication with ~~the~~ said third chamber by means of the fourth aperture formed in ~~the~~ said containing body.

35. (Currently Amended) A device ~~Device~~ according to claim ~~Claim~~ 34, ~~wherein it comprises~~ further comprising at least one pressure sensor element associated for operation with ~~the~~ said service line.

36. (Currently Amended) A device ~~Device~~ according to claim ~~Claim~~ 35, ~~wherein it comprises~~ further comprising at least one hydrophobic membrane associated

for operation with an intermediate area of the service line, between the fourth aperture and the pressure sensor element.

37. (Currently Amended) A device ~~Device~~ according to claim ~~Claim~~ 33, wherein the third chamber has a nominal volume V delimited below by a theoretical maximum level line BL and above by ~~the~~ said fourth aperture.

38. (Currently Amended) A device ~~Device~~ according to claim ~~Claim~~ 34, further comprising a pneumatic circuit for selectively sending gas to the service line and drawing gas from the service line.

39. (Currently Amended) A device ~~Device~~ according to claim ~~Claim~~ 38, further comprising a liquid level sensor LLS located above a level BL, and a control unit connected to the sensor LLS and ~~designed~~ configured to control ~~the~~ said pneumatic circuit to maintain the liquid level in the vicinity of ~~the~~ said level BL.

40. (Currently Amended) A device ~~Device~~ according to claim ~~Claim~~ 39, ~~in which the~~ wherein said level sensor is located in ~~the~~ said service line and ~~the~~ said control unit is ~~designed~~ configured to cause the execution of the following steps:

[[–]] determining whether LLS is signalling the presence of liquid, and, if so, executing the following sub-steps in sequence:

a) activation of the pneumatic circuit to drive towards the third chamber a volume V_1, equal to the volume between the section in which LSS operates and the fourth aperture,

b) activation of the pneumatic circuit to draw gas from the third chamber while LSS continues to signal the presence of liquid,

c) activation of the pneumatic circuit to drive towards the third chamber a volume of liquid V_2, equal to $V_1 + V_c$, where V_c is the volume of the third chamber;

[[–]] if, on the other hand, LLS is not signalling the presence of liquid, executing the aforementioned three steps a), b) and c) at specified time intervals.

41. (Currently Amended) A device ~~Device~~ according to claim ~~Claim~~ 34, ~~wherein it comprises~~ further comprising at least one access site located in ~~the~~ said service line for manually drawing fluid from the service line or sending fluid to ~~it~~ the service line.

42. (Currently Amended) A device ~~Device~~ according to claim ~~Claim~~ 39, wherein the level sensor LLS operates on the said containing body.

43. (Currently Amended) A device ~~Device~~ according to claim ~~Claim~~ 31, ~~wherein it comprises~~ further comprising:

[[–]] a first line for sending the physiological fluid into ~~the~~ said containing body through the first inlet aperture,

[[–]] a second line for sending the second fluid into ~~the~~ said containing body through the second inlet aperture,

[[–]] a first pump operating to create a flow along the first line,

[[–]] a second pump operating to create a flow along the second line,

[[–]] a programmable control unit for controlling the first and second pumps operating in the first and second lines and for ensuring the constant presence in the containing body of a layer whose thickness lies within a specified range, ~~this~~ said layer being located above the first physiological fluid.

44. (Currently Amended) A device ~~Device~~ according to claim ~~Claim~~ 43, wherein the control unit activates the second pump operating in the said second line in a continuous or intermittent mode[[,]] to provide a specified flow rate at every specified time interval.

45. (Currently Amended) A device ~~Device~~ according to claim ~~Claim~~ 43, ~~wherein it comprises~~ further comprising a means for sensing the actual flow in the second line, ~~this sensor~~ said sensing means sending corresponding signals to ~~the~~ said control unit.

46. (Currently Amended) A device ~~Device~~ according to claim ~~Claim~~ 43, ~~in which~~ wherein the thickness of ~~the~~ said layer is smaller than the maximum diameter of the internal surface of the containing body.

47. (Currently Amended) A device ~~Device~~ according to claim ~~Claim~~ 32, ~~in which~~ wherein ~~the~~ said first inlet aperture opens directly into ~~the~~ said first chamber in a tangential direction of access, and ~~in which the~~ said second inlet aperture opens directly towards ~~the~~ said second chamber in a direction of access parallel to that of ~~the~~ said first aperture.

48. (Currently Amended) A device ~~Device~~ according to claim ~~Claim~~ 47, further comprising a guide element housed at least partially within ~~the~~ said body and having a continuous active surface designed to contact and guide ~~the~~ said first physiological fluid, ~~the~~ said first chamber having an annular configuration and being formed between the active surface of ~~the~~ said element and the active surface of the containing body.

49. (Currently Amended) A device ~~Device~~ according to claim ~~Claim~~ 48, wherein ~~the~~ said guide element is wholly housed within the containing body, extends coaxially with the ~~latter~~ containing body, and is spaced axially apart from ~~the~~ said outlet aperture.

50. (Currently Amended) A device ~~Device~~ according to claim ~~Claim~~ 48, wherein the internal active ~~surfaces~~ surface of ~~the~~ said containing body and the active surface of ~~the~~ said guide element face each other and are shaped in the form of surfaces of revolution about a common axis of symmetry ~~which is~~ being transverse with respect to the tangential direction of access of ~~the~~ said flow.

51. (Currently Amended) A device ~~Device~~ according to claim ~~Claim~~ 48, wherein ~~the~~ said outlet aperture is positioned in a lower end of ~~the~~ said containing body, ~~the~~ said guide element and ~~the~~ said first chamber extending above ~~the~~ said outlet aperture.

52. (Currently Amended) A device ~~Device~~ according to claim ~~Claim~~ 50, wherein ~~the~~ said guide element is a solid or internally hollow solid of rotation[[,]] ~~designed~~ configured to reduce the volume of at least ~~the~~ said first chamber.

53. (Currently Amended) A device ~~Device~~ according to claim ~~Claim~~ 48, wherein ~~the~~ said guide element comprises:

[[–]] a central portion;

[[–]] a first terminal portion, facing towards ~~the~~ said outlet aperture; and

[[–]] a second terminal portion, axially opposed to the first terminal portion and facing towards ~~the~~ said second chamber.

54. (Currently Amended) A device ~~Device~~ according to claim ~~Claim~~ 53, wherein the first terminal portion has a cross section whose radial dimension is reduced progressively towards ~~the~~ said outlet aperture.

55. (Currently Amended) A device ~~Device~~ according to claim ~~Claim~~ 54, wherein ~~the~~ said first terminal portion has a conical shape, said first terminal portion having a ~~with its~~ vertex facing towards the outlet aperture.

56. (Currently Amended) A device ~~Device~~ according to claim ~~Claim~~ 53, wherein the second terminal portion has a cross section whose radial dimension is reduced progressively away from ~~the~~ said outlet aperture.

57. (Currently Amended) A device ~~Device~~ according to claim ~~Claim~~ 56, wherein ~~the~~ said second terminal portion has a conical shape, said second terminal portion having a ~~with its~~ vertex opposed to the outlet aperture.

58. (Currently Amended) A device ~~Device~~ according to claim ~~Claim~~ 53, wherein the central portion has a cross section with a radial dimension ~~which~~ that is reduced progressively away from ~~the~~ said first and second terminal portions[[,]] to form an intermediate area having a minimum radial dimension.

59. (Currently Amended) A device ~~Device~~ according to claim ~~Claim~~ 58, wherein the central portion has a curved profile in longitudinal section.

60. (Currently Amended) A device ~~Device~~ according to claim ~~Claim~~ 53, wherein ~~the~~ said active surface of the containing body has:

[[–]] a first area, of maximum radial dimension, extending around the central portion of the guide element;

[[–]] a second area, whose radial dimension is reduced progressively towards the outlet aperture, the second area extending consecutively to the first area and essentially around the first terminal portion of the guide element; and

[[–]] a third area, whose radial dimension is reduced progressively away from the outlet aperture, the third area extending consecutively to the first area and essentially around the second terminal portion of the guide element.

61. (Currently Amended) A device ~~Device~~ according to claim ~~Claim~~ 60, wherein the first inlet aperture opens into ~~the~~ said first chamber, in ~~the~~ said intermediate first area.

62. (Currently Amended) A device ~~Device~~ according to claim ~~Claim~~ 60, wherein the first area of the active surface of the containing body has a constant radius.

63. (Currently Amended) A fluid ~~Fluid~~ mixing method with gas separation, comprising the following steps:

[[–]] providing a containing body having an internal active surface and having at least a first inlet aperture, at least one fluid outlet aperture spaced apart from ~~the~~ said first inlet aperture, and at least a second inlet aperture located above ~~the~~ said first inlet aperture;

[[–]] sending a first physiological fluid into the containing body through ~~the~~ said first aperture;

[[–]] conveying a second fluid into the containing body through ~~the~~ said second aperture to form a layer of ~~the~~ said second fluid above ~~the~~ said first physiological fluid;

[[–]] conveying a separated gas from ~~the~~ said first physiological fluid and said second ~~fluids~~ fluid above ~~the~~ said layer.

64. (Currently Amended) A method ~~Method~~ according to claim ~~Claim~~ 63, ~~wherein it comprises~~ further comprising the steps of:

[[–]] measuring the flow rate of ~~the~~ said first physiological fluid;

[[–]] measuring the flow rate of ~~the~~ said second fluid;

[[–]] regulating the flow rate of ~~the~~ said first physiological fluid and ~~the~~ said second fluid to provide a layer of ~~the~~ said second fluid with a thickness lying within a specified range.

65. (Currently Amended) A method ~~Method~~ according to claim ~~Claim~~ 64, wherein ~~the~~ said second fluid is sent, in continuous or intermittent mode, in a direction of access to the containing body parallel to that of ~~the~~ said first physiological fluid.

66. (Currently Amended) A method ~~Method~~ according to claim ~~Claim~~ 64, wherein the thickness of ~~the~~ said layer is kept below the maximum diameter of the internal surface of the containing body.

AMENDMENTS TO THE DRAWINGS:

The attached replacement sheet of drawings 3/3 includes changes to Fig. 6. In Fig. 6, on branch 5 below device 1, reference numeral 34 has been replaced with reference numeral 31, which properly corresponds to the pressure sensor element positioned on branch 5.

Attachments: Replacement Sheet 3/3 (Fig. 6)

REMARKS

In the Office Action dated May 16, 2008, the Examiner objected to the drawings for failing to comply with 37 CFR 1.84(p)(4); objected to the specification based on informalities; rejected claims 1, 5-8, 10, 11, 14, and 16 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,806,135 to Siposs ("Siposs"); rejected claims 1-5 and 7 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,707,431 to Verkaart et al. ("Verkaart"); rejected claims 1-7, 10, and 11 under 35 U.S.C. § 102(b) as being anticipated by European patent application EP 1 084 722 A2; allowed claims 31-66; and objected to claims 9, 12, 13, 15, and 17-30 as being dependent upon a rejected base claim, but indicated that these claims would be allowable if rewritten to include all limitations of the base claim and intervening claims.

By this Reply, Applicant has amended claims 1-6, 9-11, 13, and 15-66 and has canceled claims 7, 8, 12, and 14. No new matter is added by this Reply.

At the outset, Applicant gratefully acknowledges the Examiner's allowance of claims 31-66 and the indication that claims 9, 12, 13, 15, and 17-30 contain allowable subject matter and would be allowable if rewritten. Applicant submits that allowed claims 31-66 have been amended by this Reply to improve readability and to cure informalities.

In the Office Action, the Examiner indicated that "the two journal articles and the Japanese reference listed on page 3 of the specification have not been considered." (Office Action at 2.) Applicant submits that the two journal articles listed on page 3 of the specification were submitted to the PTO in an Supplemental Information Disclosure Statement filed on August 21, 2008. Further, Applicant believes that the Japanese

reference listed on page 3 of the specification was incorrectly cited. Therefore, Applicants request that the Examiner indicates consideration of the two journal articles.

The Examiner objected to the drawings for " failing to comply with 37 CFR 1.84(p)(4) because reference character '34' has been used to designate both 'solenoid valve' and something in return branch 5 of fig. 6." (Office Action at 2.) In this Reply, Applicant has provided a Replacement Sheet 3/3, which includes a replacement of Fig. 6. In this replacement sheet, reference number 34 on branch 5 below device 1 has been replaced with reference numeral 31. Accordingly, new reference numeral 31 now properly corresponds to the pressure sensor element located on branch 5. Applicant points out, however, that Replacement Sheet 3/3 contains two pressure sensor elements having reference numeral 31. As described in the specification, the pressure sensor element 31 may be positioned on line 11 next to solenoid 34, or may alternatively be positioned on branch 5 below device 1, as depicted by the dashed-line block on Replacement Sheet 3/3. Thus, based on this explanation and the revision to Fig. 6 discussed above, Applicant respectfully asks the Examiner to withdraw the objection to the drawings.

The Examiner also objected to the specification "because of the following informalities: On page 13, line 24 '34' should be '31'." (Office Action at 2.) Applicant submits that this objection has been rendered moot by Applicant's amendment of the specification by this Reply and requests that this objection be withdrawn.

Applicant respectfully traverses the Examiner's rejection of claims 1, 5-8, 10, 11, 14, and 16 under 35 U.S.C. § 102(b) as being anticipated by Siposs; the rejection of claims 1-5 and 7 under 35 U.S.C. § 102(b) as being anticipated by Verkaart; and the

rejection of claims 1-7, 10, and 11 under 35 U.S.C. § 102(b) as being anticipated by EP 1 084 722 A2. While Applicant disagrees with the Examiner's characterization of these references, in order to expedite the prosecution of this application and the allowance of the pending claims, Applicant has amended claims 1, 5, 6, 10, 11, and 16 to overcome these rejections. The amendments to the pending claims are discussed in more detail below to aid the Examiner's review of the amended claims.

Claim 1 has been amended to include the limitations of previously presented claims 7 and 12, which the Examiner indicated contains allowable subject matter. Accordingly, amended claim 1 is allowable over the cited references. Thus, amended claims 2-6, 10, 11, and 13 are allowable at least due to their dependence from allowable amended claim 1.

Claim 9, which the Examiner indicated contains allowable subject matter, has been amended to include the limitations of previously presented claims 1, 7, and 8. Accordingly, amended independent claim 9 is allowable over the cited references.

Claim 15, which the Examiner indicated contains allowable subject matter, has been amended to include the limitations of previously presented claims 1, 7, and 14. Accordingly, amended independent claim 15 is allowable over the cited references. Thus, amended claim 16 is allowable at least due to its dependence from allowable amended claim 16.

Claim 17, which the Examiner indicated contains allowable subject matter, has been amended to include the limitations of previously presented claim 1. Accordingly, amended independent claim 17 is allowable over the cited references. Thus, amended

claims 18-29 are allowable at least due to their dependence from allowable amended claim 17.

Claim 30, which the Examiner indicated contains allowable subject matter, has been amended to include the limitations of previously presented claim 1. Accordingly, amended independent claim 30 is allowable over the cited references.

Accordingly, for at least the reasons discussed above, Applicant respectfully asks the Examiner to withdraw the 35 U.S.C. § 102(b) rejections of claims 1, 5-8, 10, 11, 14, and 16. As outlined above, claims 1, 5, 6, 10, 11, and 16 have been amended to overcome these rejections (or now depend from a claim that has been amended to overcome these rejections). Claims 7, 8, and 14 have been canceled by this Reply. Applicant also respectfully asks the Examiner to withdraw the objections to claims 9, 13, 15, and 17-30 for at least the reasons discussed above.

In view of the foregoing amendments and remarks, Applicant respectfully requests reconsideration and reexamination of this application and the timely allowance of the pending claims. Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P.

Dated: November 6, 2008

By: */Aaron L. Parker/*
Aaron L. Parker
Reg. No. 50,785
(202) 408-4000

Attachment: **Replacement Sheet 3/3 (Fig. 6)**

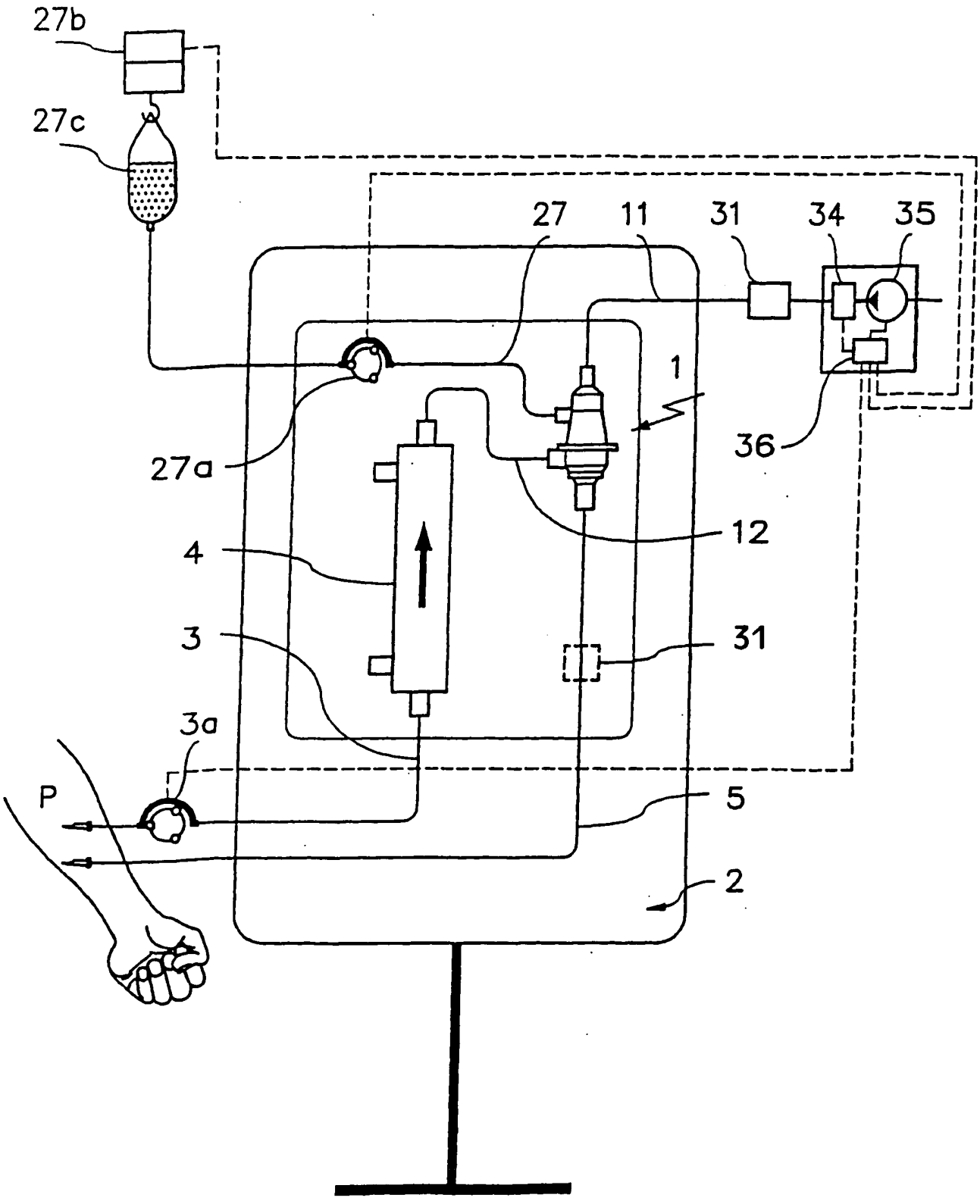

Fig. 6

PATENT
Attorney Docket No. 07552.0050-00000

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	
Nicolas SEMENZATO et al.	Group Art Unit: 1797
Application No.: 10/518,787	Examiner: Douglas J. THEISEN
Filed: December 21, 2004	
For: GAS SEPARATION DEVICES	Confirmation No.: 8238

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

PETITION FOR EXTENSION OF TIME

Applicant petitions for a three-month extension of time to file a reply to the Office Action of May 16, 2008. A fee of $1,110.00 is enclosed.

Please grant any additional extensions of time required to enter the attached reply and charge any additional required fees to Deposit Account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P.

Dated: November 6, 2008

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